

**AMENDMENT UNDER 37 C.F.R. 1.312
EXPEDITED PROCEDURE
EXAMINING GROUP 1754
PATENT
Application # 10/617,513
Attorney Docket # 1026-011**

AMENDMENTS TO THE CLAIMS

1. (Original) A method of reducing hydrogen sulfide content in a medium, comprising:
adding Fe-MGDA and a peroxide to a medium with a hydrogen sulfide content; and
reducing the hydrogen sulfide content in the medium.
2. (Original) The method of claim 1, wherein the hydrogen sulfide content is lowered
though an oxidation reaction.
3. (Original) The method of claim 1, further comprising reducing the hydrogen sulfide
content to a non-detectable amount.
4. (Original) The method of claim 1, further comprising reducing odors caused by
hydrogen sulfide.
5. (Original) The method of claim 1, further comprising preparing the Fe-MGDA.
6. (Original) The method of claim 1, further comprising contacting iron and MGDA to
form Fe-MGDA.
7. (Original) The method of claim 1, further comprising contacting Fe-MGDA and the
peroxide to form a reaction product.
8. (Original) The method of claim 1, further comprising contacting Fe-MGDA and the
peroxide to form an oxidizing agent.
9. (Original) The method of claim 1, further comprising mixing Fe-MGDA and the
peroxide prior to adding to the medium containing hydrogen sulfide.
10. (Original) The method of claim 1, further comprising mixing Fe-MGDA and the
peroxide after addition to the medium containing hydrogen sulfide.
11. (Original) The method of claim 1, further comprising adding Fe-MGDA and the
peroxide simultaneously to the medium containing hydrogen sulfide.

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12. (Original) The method of claim 1, further comprising adding Fe-MGDA and the peroxide sequentially to the medium containing hydrogen sulfide.
13. (Original) The method of claim 1, further comprising conveying a mixture of the Fe-MGDA and peroxide to the medium containing hydrogen sulfide.
14. (Currently Amended) The method of claim 1, further comprising dispersing a mixture of Fe-MDGAMGDA and the peroxide in liquid form.
15. (Currently Amended) The method of claim 1, further comprising dispersing a mixture of Fe-MDGAMGDA and the peroxide in foam form.
16. (Currently Amended) The method of claim 1, further comprising dispersing a mixture of Fe-MDGAMGDA and the peroxide in solid form.
17. (Currently Amended) The method of claim 1, further comprising dispersing a mixture of Fe-MDGAMGDA and the peroxide in gaseous form.
18. (Currently Amended) The method of claim 1, further comprising dispersing a mixture of Fe-MDGAMGDA and the peroxide in aerosol form.
19. (Currently Amended) The method of claim 1, further comprising dispersing a mixture of Fe-MDGAMGDA and the peroxide in vapor form.
20. (Original) The method of claim 1, further comprising determining an optimal dose rate for the Fe-MGDA added to the medium.
21. (Original) The method of claim 1, further comprising determining an optimal pH for removing hydrogen sulfide from the medium.
22. (Original) The method of claim 1, wherein the pH for reducing the hydrogen sulfide content is between approximately 5 and approximately 9.6.
23. (Original) The method of claim 1, further comprising determining an optimal dose rate for the peroxide added to the medium.

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24. (Original) The method of claim 1, further comprising conveying the medium after treatment with Fe-MGDA and the peroxide.
25. (Original) The method of claim 1, further comprising discharging the medium after treatment with Fe-MGDA and the peroxide.
26. (Original) The method of claim 1, further comprising measuring the levels of hydrogen sulfide before treatment with Fe-MGDA and the peroxide.
27. (Original) The method of claim 1, further comprising measuring the levels of hydrogen sulfide after treatment with Fe-MGDA and the peroxide.
28. (Original) The method of claim 1, further comprising determining a reduction in hydrogen sulfide associated with the medium.
29. (Original) The method of claim 1, further comprising reducing hydrogen sulfide concentration in the medium to less than approximately 50 parts per million
30. (Original) The method of claim 1, further comprising reducing hydrogen sulfide concentration in the medium to less than approximately 20 parts per million.
31. (Original) The method of claim 1, further comprising reducing hydrogen sulfide concentration in the medium to less than approximately 10 parts per million.
32. (Original) The method of claim 1, further comprising reducing hydrogen sulfide concentration in the medium to less than approximately 5 parts per million.
33. (Original) The method of claim 1, further comprising reducing hydrogen sulfide concentration in the medium to less than approximately 1 part per million.
34. (Original) The method of claim 1, further comprising reducing hydrogen sulfide concentration in the medium to approximately non-detectable levels.
35. (Original) The method of claim 1, wherein the medium containing hydrogen sulfide is selected from: liquid, water, groundwater, leachate, wastewater, sewer water, blackwater, graywater, bilge water, ballast water, feed water, process water, industrial

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water, irrigation water, recreational water, pond water, lake water, creek water, river water, rain water, runoff water, pool water, cooling water, non-potable water, potable water, drinking water, semi-pure water, spent ultra-pure water, sour water, waste stream water.

36. (Original) The method of claim 1, wherein the medium is selected from: a solid, solids, biosolids, rubbish, trash, refuse, waste, medical waste, radioactive waste, sweepings, scourings, rubble, debris, detritus, scum, grease, sludge, sewage, jetsam, flotsam, soil, clay, dust, sand, gravel, stones, rock, sediment, activated charcoal, paint, chemical mixture.
37. (Original) The method of claim 1, wherein the medium containing the hydrogen sulfide is a vapor.
38. (Original) The method of claim 1, wherein the medium containing the hydrogen sulfide is a liquid.
39. (Original) The method of claim 1, wherein the medium containing the hydrogen sulfide is a slurry.
40. – 41. (Canceled)
42. (Original) A method for removing hydrogen sulfide from a medium, comprising contacting the medium with a reaction product of Fe-MGDA and a peroxide.
43. (Currently Amended) A method of degrading hydrogen sulfide comprising:
contacting a medium containing hydrogen sulfide with a reaction
product of Fe-~~MDG~~AMGDA and a peroxide; and
oxidizing the hydrogen sulfide.
44. (Currently Amended) A method of degrading hydrogen sulfide comprising:
contacting a medium containing hydrogen sulfide with a reaction product of Fe-
~~MDG~~AMGDA and a peroxide; and

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oxidizing the hydrogen sulfide.

45. (Original) The method of claim 44, wherein the reaction product is an oxidizing agent.

46. (Currently Amended) A method for reducing a concentration of a contaminant associated with a medium, comprising:

treating the medium with Fe-MGDA and an oxidizing agent; and
reducing an odor produced by the contaminant.

47. (Original) A method for treating sewers, comprising:

adding Fe-MGDA and a peroxide to a medium within a sewer; and
reducing the content of a contaminant within the medium.

48. (Original) The method of claim 47, wherein at least one of the Fe-MGDA and the peroxide are in a vapor form.

49. (Original) The method of claim 47, wherein at least one of the Fe-MGDA and the peroxide are in a liquid form.

50. (Original) The method of claim 47, wherein the contaminant is in a vapor form.

51. (Original) The method of claim 47, wherein the contaminant is in a liquid form.

52. (Original) The method of claim 47, wherein the contaminant is in solid form.

53. (Original) The method of claim 47, wherein the Fe-MGDA is added at a constant rate.

54. (Original) The method of claim 47, wherein the FE-MGDA is added at a variable rate.

55. (Original) The method of claim 47, wherein the FE-MGDA is added intermittently.

56. (Original) The method of claim 47, wherein the peroxide is added at a constant rate.

57. (Original) The method of claim 47, wherein the peroxide is added at a variable rate.

58. (Original) The method of claim 47, wherein the peroxide is added intermittently.